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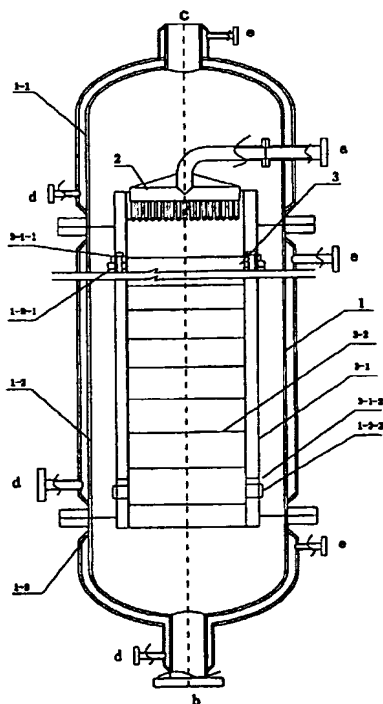
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(54) Title: A Devolatilization Tower falling films through the grid gaps

(54) 发明名称: 一种栅缝降膜脱挥塔



(57) Abstract: The devolatilization tower falling films through the grid gaps according to this invention consists of a tower body, a liquid distributor and a tower core, said tower core including pillars and multilayers of grid plates, the cross-section of said tower core being square or rectangular, and the pillars standing respectively at the four corners of the tower core. Each grid plate layer includes a pair of beams, several grids and corresponding guide members, among them said beam being located at the opposite sides of the grid layer and fixed to the pillars, said grid being perpendicular to the beams, and said guide member being installed between the grid gaps and guiding liquid to pass through those grid gaps, forming falling films and thus producing enormous devolatilization interfaces. This special design according to the invention ensures the substantial regeneration of each film surface. In view of the simple structure, high devolatilization efficiency, and high operation flexibility, as well as the low cost of manufacture and operation, the devolatilization tower falling films through the grid gaps could be used widely in a variety of devolatilization units in the chemical engineering field.

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(57) 摘要

本发明涉及的一种栅缝降膜脱挥塔由塔体、液体分配器及塔芯组成，所述塔芯包括立柱和多层栅板，其截面为正方形或矩形，立柱四根分立于塔芯四角。各栅板层有一对横梁、多根栅条及相应的导流构件，横梁位于栅板层对边，固定在立柱上；栅条与横梁垂直，导流构件置于栅条的栅缝间，液体穿过各层栅缝降膜，产生巨大脱挥界面，本发明的特殊设计保证各层膜面充分更新。该栅缝降膜脱挥塔结构简单、脱挥效率高、操作弹性大、制造和运行费用低，可广泛用于各种化工脱挥操作单元中。